



Safety in Numbers

Calgary's Safety
Measurement Indicators
Report for 2000












March 2003

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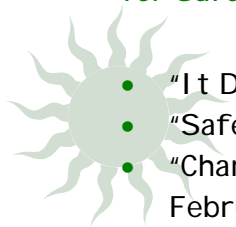
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- "It Doesn't Hurt to Live in a Safe Community", November 1998
- "Safe Community for Calgary", May 1999
- "Charting the Course for a Safer Community for Calgary", February 2000

Overview



Calgary is one of the fastest growing cities in Canada, with a population of 878,866 in 2002. Located in the Canadian prairies, it is the oil and gas capital of the nation, although its economy is diverse and includes light manufacturing and farming. In addition, Calgary's proximity to the Canadian Rocky Mountains has enabled the tourism industry to flourish in this area. Calgary has one of the fastest growing economies in Canada, which attracts an increasing number of new residents every year.

Calgary's growing population is also diverse. With new Canadians arriving regularly in Calgary from all over the world, the city has seen the face of its population change dramatically. For example, only 1 in 350 Calgarians was a member of a visible minority group in 1959.¹ By 2001, that figure had increased to 1 in 5,² and it is projected to be 1 in 4 by 2016.³



A city's rapid economic and population growth is commonly accompanied by a decrease in the safety and well-being of its residents. Increased traffic, crime, pollution and organized crime have all been associated with urban growth. To date, although Calgary has experienced significant growth in traffic and population, the city's exposure to negative impacts from these trends have been relatively controlled, and as Calgary approaches the one million population mark, there is an excellent opportunity to sustain this trend.

Calgary is fortunate to have hundreds of programs and policies that contribute to making it safe. Most of these programs and policies are affiliated with *Safer Calgary*, an initiative created in 1999 through a motion at City Council by Alderman Bob Hawkesworth to reduce both intentional and unintentional injuries in Calgary. Guided by a mission to "foster community action towards the creation of a safer Calgary,"⁴ this initiative links more than 100 organizations working in the area of safety promotion and violence prevention. *Safer Calgary* has organized its efforts into three issue streams: (1) injury prevention, (2) violence prevention and (3) natural and built environments.

¹ Calgary Network for Equity and Diversity. (2000). Valuing Equity and Diversity: A Calgary Perspective.

² Statistics Canada. (2001). Federal Census.

³ Projections prepared by The City of Calgary. Unpublished.

⁴ Safer Calgary mission statement.

Overview



The establishment of *Safer Calgary* is a long-term preventative strategy to reduce injuries and to promote safety in Calgary. Research shows that prevention of injuries costs less than treatment. For example, each dollar spent on bicycle helmets saves \$29 in the long run.⁵ Focussing on the prevention of injuries reduces individual trauma as well as cost to the health care system, to community resources and to the economy.

Safer Calgary has adopted the Safe Community model, promoted by the World Health Organization (WHO), to reduce injuries and make Calgary safe for all citizens. According to this model, a safe community is one that aspires to safety in a structured approach and utilizes creative methods of education and environmental change, as well as legislation and enforcement. This model was created at the First World Conference on Accident and Injury Prevention held in Stockholm, Sweden in September 1989. The resolution of the conference states that “all human beings have an equal right to health and safety.”⁶ This premise has led to community actions around the world, actions leading to safer communities.



A community must meet six criteria in order to be recognized as “safe” and Calgary is proud to be recognized as a safe community based on these criteria:

- an infrastructure based on partnership and collaboration, governed by a cross-sectional group that is responsible for safety promotion in their community;
- long-term, sustainable programs covering both genders and all ages, environments, and situations;
- programs that target high-risk groups and environments, and programs that promote safety for vulnerable groups;
- programs that document the frequency and causes of injuries;
- evaluation measures to assess programs, processes and the effects of change and
- ongoing participation in national and international Safe Communities networks.

⁵ Alberta Centre for Injury Control and Research. (2002). Economic Burdens of Unintentional Injuries in Alberta. <http://www.med.ualberta.ca/acic/>

⁶ WHO Collaborative Centre on Community Safety Promotion. (2002). Introduction to the WHO Collaborative Centre on Community Safety Promotion. <http://www.phs.ki.se/csp/introduction.htm>

Overview



This report is a response to the fifth criterion listed above: the need for measurement indicators to track and evaluate the effects of the change process. It is a “baseline report” that provides a snapshot of what Calgary looks like with respect to safety in the year 2000 and it will be used as a benchmark against which to plot the progress of *Safer Calgary* in the next 10 to 20 years and beyond.

The development of this report

While innumerable safety-related issues and concerns can be traced back throughout Calgary's history, the most recent events culminating in the current *Safer Calgary* initiative and this report can be summarized as follows.



The genesis of Calgary's initiative toward the development of a set of indicators of safety-related measures, behaviors and attitudes began in late 1998 with the “It Doesn't Hurt to Live in a Safe Community” forum held on November 26 of that year at the University of Calgary. This forum represented the first community consultation around the Calgary Injury Prevention Coalition's global objective of obtaining WHO Safe Community Designation for Calgary. Through dialogue with Dr. Leif Svanström, head of the WHO Collaborating Centre on Community Safety Promotion, a diverse group of organizations and individuals operating under the auspices of the Calgary Injury Prevention Coalition, concluded that proper data measurement criteria and a surveillance system needed to be in place in order for Calgary to realize its vision of being a safe community.

This need for data and indicators of success was reiterated in a subsequent community forum, “Safe Community for Calgary,” jointly sponsored by the Calgary Injury Prevention Coalition and the City of Calgary on May 13, 1999. It was acknowledged in that forum that a critical component for building a safer community was, among other things, the identification of indicators of success. In addition, it was recognized that accurate current or baseline data needed to be collected in order to separate the perception of safety from reality. Furthermore, it was concluded that a *Safer Calgary* initiative must be outcome based, with a built-in evaluation plan so that community change can be identified.

Overview



These conclusions and commitment to action were further consolidated in yet another community stakeholder forum, “Charting the Course for a Safer Community for Calgary,” held on February 29, 2000. Within this forum, groups of individuals addressed issues of criteria for useful measurement indicators and began the detailed process of developing measurement indicators for each category of interest.



A Measurement Indicators Task Group was then created to further refine identified indicators and to undertake the task of developing a format and process for the collection, analysis and interpretation of relevant data. To this end, the Task Group was able to enjoy the assistance of faculty and graduate students through the division of Industrial and Organization Psychology within the Department of Psychology at the University of Calgary to develop an attitudinal measurement protocol. It was anticipated that such an instrument would be able to measure and monitor the shifting change in attitudes and behaviors of Calgarians in the context of other initiatives directed to safety promotion.

Guiding Principles

The principles that guide the work of *Safer Calgary* have also guided the development of this report. These include the following:

- We believe that each person in Calgary should live and work in safety.
- We will lead the community in proactively identifying emerging safety issues.
- We will define “safety” as broadly as necessary to ensure that our safety objectives are achieved.
- We welcome opportunities to collaborate and partner with others who share our aims.
- We believe that active, grassroots participation and community ownership are integral to the resolution of safety concerns in Calgary.
- We value and respect diversity. In our work, we are inclusive of all individuals and organizations who share our aims, and we are willing to reach out to those not yet engaged.
- We encourage leadership that is expressed through the positive effects and beneficial outcomes of our work on safety issues in Calgary.



Overview



The purpose of this report

Any effort to decrease injuries and increase behaviors that sustain or improve health must begin with an accurate understanding of the base rate of occurrence of injuries and potentially injurious behaviors and corresponding attitudes. Without such an understanding, little can be said about the efficacy of any efforts designed to bring about desired changes in behaviors and thinking about safety.



The purpose of this report is to document some of the indicators that can be used to measure the overall level of safety in Calgary and to elevate the profile of safety to a higher level of public debate. Over the next few years, these indicators will be monitored to determine the trend and overall situation regarding safety in Calgary. It is understood that these indicators are not complete reflections of the overall safety level in Calgary. However, as a group, they provide a platform for further discussion and action on the issue of safety in Calgary.

Using this report

This report will hopefully be a catalyst for action toward a safer and healthier Calgary. The best way to use it is to read it and reflect on how safety and injury prevention can be promoted in the community, individually and collectively. Some strategies include those listed below:



At the individual level:

- Learning, and teaching those around us, about the cause and prevention of injuries at work, home and play.
- Learning how to prevent crimes in our environment, including learning CPTED⁷ concepts.
- Adopting a lifestyle that will promote a healthier and safer natural environment.

⁷ Crime Prevention Through Environmental Design

Overview



At the community level:

- Identifying gaps and emerging safety issues requiring more attention.
- Initiating programs or launching campaigns to raise awareness on safety issues.
- Creating a comprehensive response mechanism to assist victims of violence and injury.
- Using this document as a means of gaining consensus in the community regarding violence and injury prevention issues.
- Using this document as a service-planning tool.
- Using this document as a baseline to monitor changes.

The use of indicators in this report

Indicators are very useful in understanding where we are, what our future direction needs to be and how far we are from where we want to be. A well-selected indicator is also a signpost for any emerging problems, thus allowing for preventative actions.



While the use of indicators is a good way to measure progress, it also presents some challenges. No indicator is perfect and interpretation of existing data always has limitations. For example, because workplace injuries are recorded according to the location of the Head Office of the company employing the injured worker, many workplace injuries reported for the Calgary area may actually have occurred in locations hundreds of kilometers from Calgary. Understanding the administration of the data is imperative, as it has implications for future actions.

Some of the indicators used in this report call for an in-depth understanding of the cultural and historical context to make better use of the data. For example, domestic violence and hate/bias crime data involve victims reporting the crime to the law enforcement community.



Overview



Historically, victims of these types of crime have been reluctant to report their experiences. Therefore, a decrease in the number of reported crimes in these areas does not necessarily reflect a decrease in domestic or hate/bias crime.

The categories

The indicators are categorized along the three issue streams of *Safer Calgary*, which are: (1) injury prevention (2) violence prevention and (3) natural and built environment. A fourth category of indicators has been added to capture public attitude, belief and behavior about safety. This category complements the administrative data used in the other three categories with judgement data, which allows for a cross-analysis between perception and actual occurrence. The indicators and the categories are shown in the following table.

Public attitude, beliefs & behaviors	<ul style="list-style-type: none"> ▪ Perception of safety
Injury prevention	<ul style="list-style-type: none"> ▪ Injury related emergency room visits per capita ▪ Injury related hospitalization per capita ▪ Injury related fatalities per capita ▪ Potential Years of Life Lost (PYLL) due to injury ▪ Workplace injury
Crime & violence	<ul style="list-style-type: none"> ▪ Person crime ▪ Property crime ▪ Youth accused ▪ Adult accused ▪ Domestic-related offences reported by victims ▪ Offences motivated by hate/bias ▪ Child interventions ▪ Motor vehicle collisions and those involving alcohol
Natural & built environment	<ul style="list-style-type: none"> ▪ Air quality ▪ Water quality ▪ Pesticide use

Table 1: Safety Indicators.

Overview



In this report, the following questions are answered for each category:

- What is the category?
- Why should we care about this category?
- What is the profile of this category in the Calgary region?
- What are the indicators used to measure this category?
- What is currently happening in Calgary?
- What needs to happen?

Indicator selection criteria

Each indicator was selected based on the following criteria:

- Data is readily available for this indicator.
- Data is regularly collected for this indicator.
- The indicator is consistent with the safe community model.
- People understand and care for this indicator.
- This indicator leads to action.



Category I: Public Attitude and Belief



This section deals with the following indicator:

- Perception of Safety

HIGHLIGHTS

Calgarians believe that the level of crime in their neighborhoods is lower in Calgary than in other areas in Canada.

Forty-five percent of Calgarians feel very safe walking alone in their area after dark.



Category 1: Public Attitude & Belief



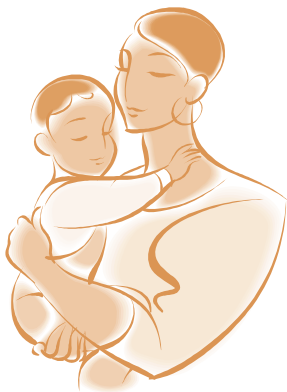
What is “public attitude and belief”?

An attitude is a predisposition that is primarily grounded in emotion and is often expressive of opinion rather than fact. A belief is a state of mind or habit in which trust, confidence or reliance is placed in some person or thing. Attitudes and beliefs become public when they are shared by a group of people and come to shape their perceptions of the environment and to affect their behavior. Public attitudes and beliefs about safety include how people in Calgary perceive their level of risk to injury or harm, their perception of crime, their concern about being victimized, and their feelings about safety levels in their homes and communities. Assessing how safe people feel is often used as a global measure of attitudes and beliefs about safety.



Why should we care about public attitude and belief regarding safety?

It is important to pay attention to public attitude and belief around safety issues, as there is a correlation between people's attitudes and beliefs and their behavior. For example, people who feel more vulnerable to crime, violence or injury may change their behavior (e.g., stay at home; avoid certain streets or activities) to minimize their risk of being victimized. This is true regardless of whether they are, in fact, at greater risk of being a victim of a crime, violence, injury or not. Understanding Calgarians' attitude and belief regarding safety may help in developing the most appropriate response to their concerns.



What is the profile of public attitude and belief in the Calgary region regarding safety?

Very little information exists about Calgarians' attitude and belief regarding safety. While some information exists on perceptions of crime, there is a remarkable gap in the overall perception of safety. From the 1999 General Social Survey conducted by Statistics Canada, one can conclude that in general, Calgarians believe that the level of crime in their neighborhoods is lower in Calgary than in other areas of Canada and that it has remained the same in the last five years. The following table depicts the perceptions of crime in various Canadian cities.

Category 1: Public Attitude & Belief



Census Metropolitan Area	During the last 5 years, has crime in your neighborhood			Compared to other areas in Canada is crime in your neighborhood		
	Increased	Stayed the same	Decreased	Higher	About the same	Lower
	% population aged 15+					
St. John's	26	59	8*	--	9	87
Halifax	36	48	6*	9	31	58
St. John's	18*	66	8*	--	23	69
Quebec	21	59	8*	5*	32	58
Montreal	25	56	8	9	36	48
Ottawa-Hull	27	53	8	6*	26	60
Toronto	30	50	6	11	28	53
Hamilton	36	47	6*	10	28	57
Thunder Bay	27*	53	--	--	34	40
Winnipeg	38	48	41	10	33	50
Regina	38	48	--	11*	34	51
Saskatoon	37	51	--	71	32	57
Calgary	31	47	7	6	32	57
Edmonton	30	54	4*	9	27	60
Vancouver	38	46	5	16	33	47
Victoria	31	50	--	--	32	61
* Coefficient of variation between 16.6% and 33.3%						
-- amount too small to be expressed						

Table 2: Perception of crime for population aged 15+, by Census Metropolitan Area, 1999.

What is the indicator used to measure this category?

Perception of Safety

The Calgary Police Service conducts a survey of Calgarians' perception of safety every two to three years.⁸ In 2000, a survey was administered to a representative sample of 2,007 households.

⁸ Poetschke, N. (2000). Community Survey 2000. Calgary Police Service.

Category 1: Public Attitude & Belief



To measure overall public perceptions of safety, survey participants were asked, “how safe would you feel walking alone in your area after dark?” As shown in Figure 1, the majority of Calgarians feel very or reasonably safe (43 per cent reported feeling very safe and 36 per cent reported feeling reasonably safe).

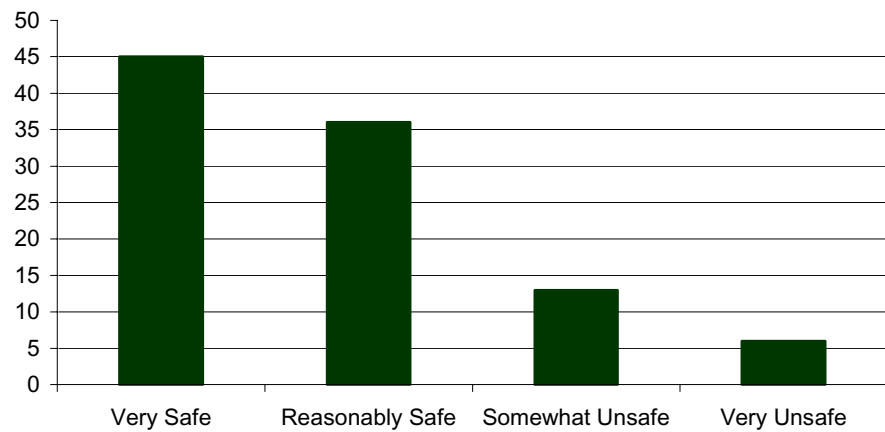


Figure 1: Perception of Safety in Calgary, 2000.

What is currently happening in the Calgary region?

Numerous surveys have documented the attitudes of Calgarians regarding selective aspects of their safety and well-being.

These include:

- Action Committee Against Violence (May 1999)
- Calgary Health Region 1999 Traffic Safety Social Marketing Initiative
- Calgary Police Service 2000 Community Survey and
- City of Calgary Annual Customer Satisfaction Survey



While each of the surveys have examined certain aspects of safety and well-being, no single survey has been conducted that captures a more comprehensive view of these diverse issues or that examines both attitudes and behaviors of Calgarians.

Furthermore, none of the surveys mentioned above examines changes in attitude or behavior over time.



Category 1: Public Attitude & Belief



There are a number of initiatives in Calgary aimed at improving the overall sense of safety among Calgarians. For example, the Block Watch/Apartment Watch initiative mobilizes people residing within the same block/apartment to look out for each other. Similarly, CrimeStoppers, Safety Audits and the reporthathe.org website are intended to decrease Calgarians' sense of vulnerability.

What needs to happen?

While Calgarians in general feel safe, more precise indicators of perception of safety are needed to get a better understanding of this indicator and to assist policy makers and service providers in developing proactive measures to improve Calgarians' perception of safety. Particular attention should be given to the perception of safety of those who are at an increased risk of injury or violence because of their isolation or other life circumstances. More studies are also needed to document Calgarians' perception and belief regarding other aspects of safety, such as environmental and workplace safety.



Category II: Injury Prevention Data



This section deals with the following indicators:

- Injury related emergency room visits per capita
- Injury related hospitalization per capita
- Injury related fatalities per capita
- Potential Years of Life Lost (PYLL) due to injury
- Workplace injuries

HIGHLIGHTS

In 2000, there were 403 injury-related fatalities, 6,159 injury-related hospitalizations and 66,306 injury-related emergency department visits.

The Potential Years of Life Lost (PYLL) for Calgary was 14,089 in 2000.

In 2000, there were 20,720 workplace injury claims made in Calgary, with a total amount of \$45,709,646.

Category II: Injury Prevention Data



What is “injury”?



Injury is defined as the damage that occurs from the transfer of thermal, mechanical, electrical or chemical energy or from the absence of such essentials as heat or oxygen. Injuries are unique because unlike most other disease processes, the damage to cells and organs occurs immediately as the result of a rapid transfer of energy. Injuries can be classified as either intentional or unintentional, with the majority being predictable and preventable.

Why should we care about injuries?

The societal and economic impacts of injury are enormous. In addition to the pain and suffering experienced by individuals, families and communities, direct costs of treating injury are staggering and include hospitalization, medications, physician fees, rehabilitation and long-term care. The indirect costs associated are often more difficult to calculate, but society pays a very high price when all the aspects of injury are considered.

What is the profile of injuries in the Calgary region⁹?



Calgary region residents experience injuries throughout their lives; however, some groups have a higher risk for specific types of injuries. Young people between the ages of 16 and 24 are at particular risk for motor-vehicle related injuries and deaths. Young children and older adults, especially women over age 75, are at particular risk for fall-related injuries. Suicide represents one of the largest single contributions to premature death, and a significant percentage occurs in young adults.

In the Calgary region, injuries are the leading cause of death for people age 1 to 49 and account for the highest volume of Potential Years of Life Lost (PYLL). In the year 2000, there were 403 injury-related fatalities, 6,159 injury-related hospitalizations and 66,306 injury-related emergency department visits.

⁹ Calgary Health Region. (2000). [Corporate Database](#).



Category II: Injury Prevention Data



These numbers represent the following rates for Calgary region residents:



- 42.6 injury fatalities per 100,000
- 651 injury-related hospitalizations per 100,000
- 7005 injury-related emergency department visits per 100,000

People in the Calgary region are most commonly injured or killed in motor vehicle related events, falls, suicide, violence and workplace incidents.

Due to Calgary's rapid population growth, there has been a corresponding increase in both residential and industrial construction. These sectors, along with the oil and gas-related industries, account for the majority of workplace injuries reported in Calgary.

Calgary has a very young population base, with many highly educated people moving to the city to take advantage of the booming economy. It is recognized that young people have a higher rate of injuries per population than more mature workers.

What are the indicators used to measure this category?



Number of injury-related emergency room visits per capita and number of injury-related hospitalizations per capita

Injury-related emergency department visits are all of those individuals treated in the Calgary Health Region's hospital emergency departments due to an event coded as an injury.

Injury-related hospitalizations comprise all of those individuals hospitalized in the Calgary Health Region due to an event coded as an injury. Hospitalizations include those individuals who have also been seen in the emergency department.

The number and rate of hospitalizations and emergency department visits for all injuries, broken down into the top five injury causes, are illustrated in Figures 2 and 3 below.



Category II: Injury Prevention Data

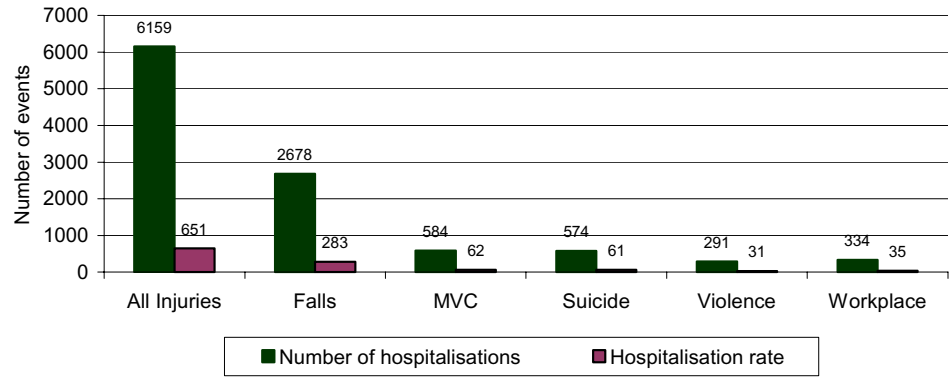


Figure 2: Injury-related hospitalizations and hospitalization rate per 100,000 population for Calgary region residents, 2000.

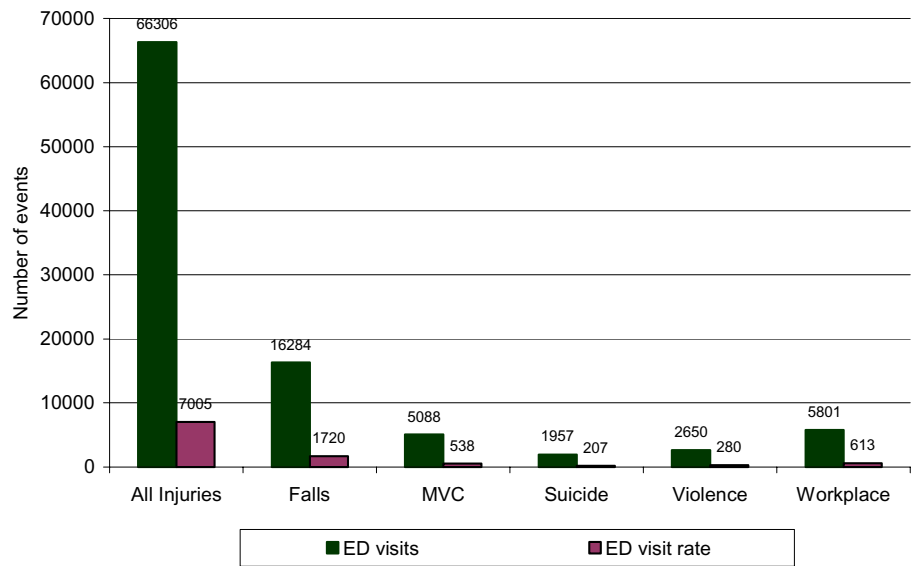


Figure 3: Injury related Emergency Department (ED) and ED visit rate per 100,000 population for Calgary region residents, 2000.

Category II: Injury Prevention Data



Number of injury-related fatalities per capita and Potential Years of Life Lost (PYLL) due to injury

PYLL is a calculation of the total years of premature mortality in a population from a particular cause such as injury. It is derived by summing the differences between the actual age at death and the expected age at death of 80 years, for each injury-related fatality. In the year 2000, the PYLL for Calgary was 14,089.

Workplace injuries

The working population of Alberta represents approximately 1 million employees in the year 2000. There are 112,000 employers in the Province registered with the Workers' Compensation Board (WCB). Statistics for workplace injuries are captured by the WCB as all workers are automatically covered by WCB insurance coverage which is paid for by employers. Provincial legislation requires that all workplace injuries be reported and hospitals routinely capture work related data which is forwarded to the WCB.



The basis of the workers' compensation system is an agreement between employers and workers to provide no-fault disability insurance for the mutual benefit of both parties. No-fault insurance means that if a worker gets hurt on the job, that worker has insurance to cover the costs and lost income resulting from the injury or illness without having to establish fault before receiving those benefits. In 2000, 20,720 claims were reported for employers in Calgary, with a total compensation amount of \$45,709,646.¹⁰

What is currently happening in the Calgary region?

A variety of individuals and groups, representing diverse networks, are currently working to prevent and reduce injuries in the Calgary region. The Calgary Injury Prevention Coalition (CIPC) and the Action Committee Against Violence (ACAV) are key networks of like-minded organizations that combine their efforts to promote risk reduction and the creation of safe environments.

¹⁰ Workers' Compensation Board. (2000). Personal communication.

Category II: Injury Prevention Data



Both coalitions are active in the *Safer Calgary* initiative that has recently formed to further expand the opportunities for collaboration in the areas of injury prevention, violence prevention and safety in the natural and built environments.



While the Alberta WCB has responsibility for compensating injured workers and collecting funds from employers to cover those costs, a separate provincial government organization, Alberta Human Resources and Employment, Workplace Health and Safety, is responsible for initiatives to prevent workplace injuries. They carry out their mandate through inspections of worksites and facilitating safety education and training programs in cooperation with several industry sector Safety Associations. They work closely with the WCB in providing financial incentive programs to encourage employers to institute programs that ensure the safety and health of their workers.

What needs to happen?

While the public is increasingly aware of safety issues, many people continue to accept injuries, suicide and violence as inevitable parts of daily life. Progress is being made but there is still much more to be done. Public perceptions and attitudes about injury-causing events need to be better understood so that prevention efforts can support the development of zero tolerance and increased individual and collective action. Activities that target known risk groups need to be continued and expanded. The opportunities to strengthen community safety promotion activities where residents live, work and play must be maximized.



Category III: Crime and Violence



This section deals with the following indicators:

- Person crime rate
- Property crime rate
- Youth accused rate
- Adult accused rate
- Domestic-related offenses reported by victims
- Offenses motivated by hate/bias
- Child intervention
- Motor vehicle collisions and those involving alcohol

HIGHLIGHTS

Person crime and property crime rates were 1,061 and 6,122 per 100,000 population respectively in 2000.

Calgary's overall crime rate has decreased in the last five years.

In 2000, there were 5,291 domestic-related and 133 hate/bias-related offences in Calgary.

In 2000, Calgary Rocky View Child and Family Services Regional Authority responded to 1,855 cases of neglect, 305 cases of sexual abuse, 753 cases of physical abuse and 671 cases of emotional abuse.

Category III: Crime and Violence



What is “crime and violence”?

The sources available to describe the incidence and nature of crime and violence include police occurrence data, victimization survey data and court survey data. All of these measure some aspect of crime activity. However, police occurrence data is the most commonly used source to describe crime in a particular jurisdiction and to compare across jurisdictions. Occurrence data typically include Criminal Code offences, as well as Canadian Drug and Substance Act and Highway Traffic Act offences. These data represent all offences reported to, or detected by, the police and are typically reported as rates per 100,000 population.



Why should we care about crime and violence?

While all citizens are potential victims of crime and violence, people who have been personally affected by crime and violence often suffer physical and emotional pain, financial losses and may become paralyzed by a fear of being further victimized.

Increases of crime and violence can also adversely affect the quality of life of all Calgarians. Calgary is perceived as one of the safest cities in North America, a reputation that has contributed to the attraction of thousands of people and investment dollars each year. In cities where crime and violence are rampant, the sense of security, belonging and ownership among the population is eroded, which in turn deteriorates the quality of life in that city. In addition to personal loss and injury, higher levels of crime and violence can negatively impact a city's prospect of economic and social development by discouraging business from relocating to Calgary.



What is the crime and violence profile in the Calgary region?

Despite significant population growth and evidence of increasing economic disparity, Calgary's overall crime rate decreased between 1996 and 2000. This is due in large part to the steady decline (decrease of 17%) in property offences, which account for largest proportion of offences in a given year. However, the person crime rate increased by 14% during this five-year period.

Category III: Crime and Violence



Between 1996 and 2000, young offenders typically accounted for a disproportionate number of offenses. During this five-year period, youth represented approximately 8 percent of Calgary's population but accounted for 26 per cent of all criminal code offences.



What are the indicators used to measure this category?

Person crime rate¹¹

Person or violent crime refers to violent offences and includes homicide; street; financial and commercial robbery; sex offences; assault and miscellaneous offences such as kidnapping, extortion and harassment. In 2000, the person crime rate was 1,061 per 100,000 population.

Property crime rate¹²

Property crime refers to break-and-enters, thefts, vehicle thefts, fraud and other miscellaneous property related offences (e.g., mischief, vehicle damage, arson). In 2000, the property crime rate was 6,122 per 100,000 population.

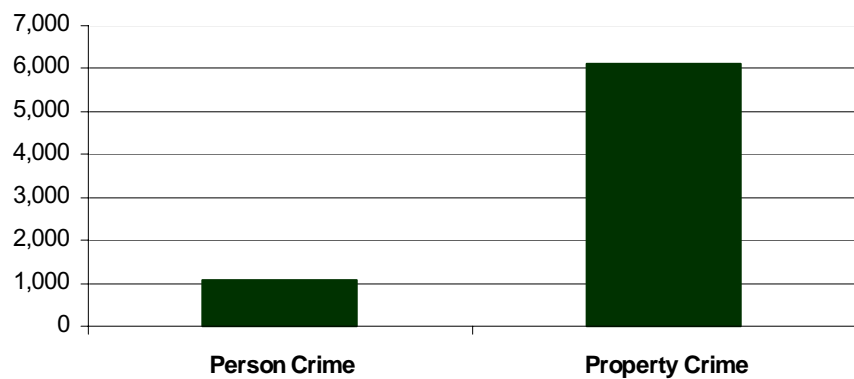


Figure 4: Person and Property Crime Rates per 100,000 population for Calgary, 2000

¹¹ Wiltse, J. et al. (2001). Annual Statistical Report, 1996-2000. Calgary Police Service.

¹² Ibid.



Category III: Crime and Violence



Accused rate¹³

Accused rates enable us to understand the involvement of different segments of the population in criminal activity. Police occurrence data include all offences, regardless of whether or not a culprit was apprehended. However, in order to determine levels of involvement by age group, the culprit must be apprehended and the case cleared by charge. Accused rates are based on only those offences for which a culprit was apprehended and charged.

Youth accused rate is based on the total number of accused, 12 to 17 years of age, divided by the number of youth in Calgary. In 2000, the youth accused rate was 72.2 per 1,000 youth.

Adult accused rate is based on the total number of accused 18 years of age and over divided by the total number of adults in Calgary. In 2000, the adult accused rate was 21.0 per 1,000 adults.

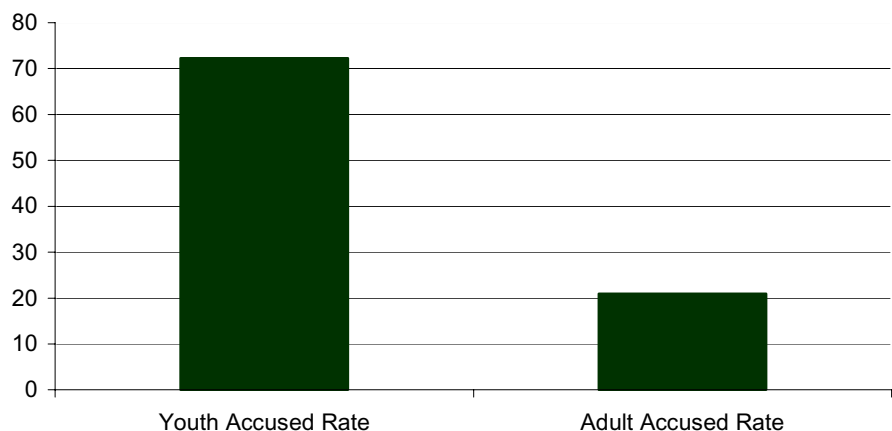
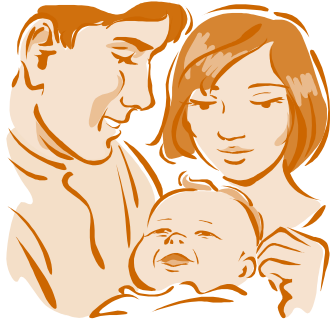


Figure 5: Youth and Adult Accused Rates per 100,000 population for Calgary (2000)

¹³ Ibid.

Category III: Crime and Violence



Number of domestic-related offences reported by victims¹⁴

Domestic-related offences are Criminal Code offences involving a domestic relationship between the culprit and at least one victim. Domestic relationships include those of brother or sister; cohabiting partner; common-law husband or wife; ex-cohabiting partner; ex-common law husband or wife; ex-husband or -wife; father or mother; foster parent; foster son or daughter; foster brother or sister; grandmother or grandfather; husband or wife; son or daughter; uncle or aunt and extended family (e.g., nephew/niece, father/mother-in-law, great-grandfather). In 2000, 5,291 domestic-related offences were reported to the Calgary Police Service.

Number of offences motivated by hate/bias¹⁵

A hate/bias crime is a criminal offence committed against a person or property that is motivated, in whole or in part, by bias, prejudice or hate based on race, national or ethnic origin, language, color, religion, gender, age, mental or physical disability or sexual orientation of the victim. Offences range from assaults and robberies to break-and-enter and mischief to threats. In 2000, 133 hate/bias-motivated offences were reported to the Calgary Police Service.



Number of child interventions¹⁶

The Alberta Child Welfare Act and the Canadian Criminal Code set out in legal terms what behaviors and conditions might be so harmful to children that it is necessary to stop them. The main kinds of behaviors that require intervention are the following:

- *Physical abuse*: the intentional use of force on any part of a child's body that results in serious injuries. It may be a single incident or a series or pattern of incidents.
- *Emotional abuse*: the chronic exposure of a child to alcohol or drug abuse, verbal attacks on a child's sense of self, repeated humiliation or rejection.

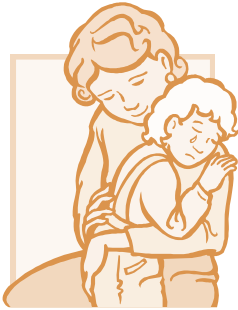
¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Calgary Rocky View Child and Family Services Regional Authority. (2000). Personal communication.



Category III: Crime and Violence



- *Sexual abuse*: the improper exposure of a child to sexual contact, activity or behavior.
- *Neglect*: lack of care that causes serious harm to a child's development or endangers a child in any way.

In 2000, the Calgary Rocky View Child and Family Services Regional Authority responded to 1,855 neglect cases, 305 sexual abuse cases, 753 physical abuse cases and 671 emotional abuse cases.

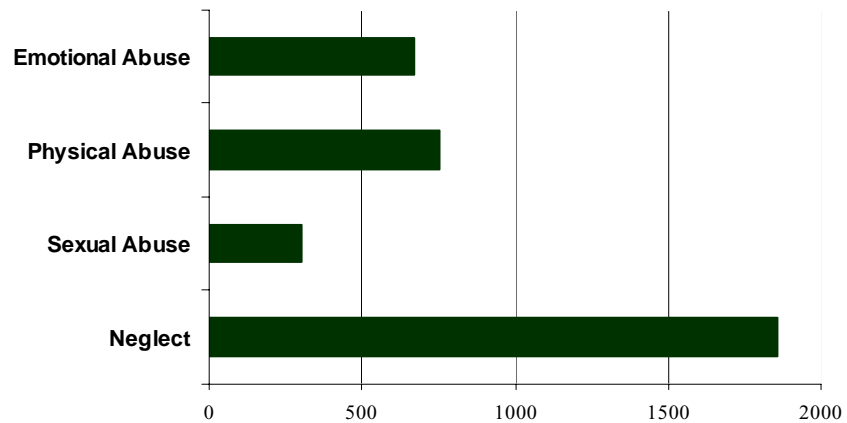


Figure 6: Number of Child Interventions in Calgary region, 2000

Number of motor vehicle collisions and those involving alcohol¹⁷

Motor vehicle collisions involving alcohol are recorded on Alberta Collision Reports by the Calgary Police Service and forwarded to the Provincial Government. Reports must be completed by Calgary Police Service officers either attending a collision or depending on the level of injury or damage, later at district offices. Officers at the scene usually make a determination of whether alcohol was involved in a collision and normally, through breathe analysis. However, sometimes blood testing, which is completed by a physician must be employed. If the driver is killed, determination of alcohol involvement is completed through an autopsy.



¹⁷ Calgary Police Service, Traffic Section. (2000). Budget Presentation.

Category III: Crime and Violence

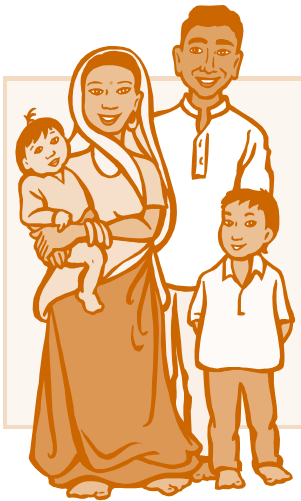


	All Collisions	Collisions Involving Alcohol
Fatal collision	32	13
Non-Fatal collision	3,753	142
Property damage collision	31,103	324
Total reported collision	34,888	479

Table 3: Number of motor vehicle collisions and those involving alcohol in Calgary, 2000.

What is currently happening in the Calgary region?

The robustness of Calgary's economy continues to attract educated professionals and major business players. But along with this growth comes increased traffic congestion, the climate for organized crimes and other crimes of opportunity that can pose a threat to the safety and well-being of Calgarians. The terrorist attacks of September 11, 2001 and other world events may contribute to heightened inter-cultural tension among certain cultural groups in the coming years.



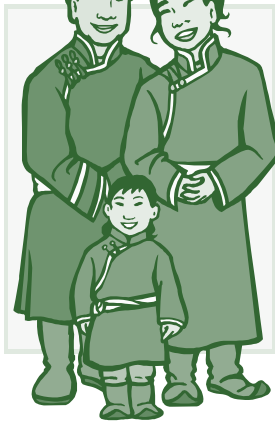
The Calgary Police Service along with its community partners plays a crucial role in preserving the quality of life in the community by maintaining Calgary as a safe place to live. The Service is committed to the concept of community-based policing, characterized by positive community relations and a problem-solving approach. There is a focus on crime prevention, crime detection and apprehension, and traffic safety.

The Calgary Police Service has specialized units that work with young people in the schools to deal with domestic-related offences, investigate hate/bias-motivated crimes and to respond to children at risk. The Traffic Section has been a strong supporter of Alberta Motor Association efforts to reduce the number of people who drink and drive. It is one of the few agencies that operate a *CheckStop* program 52 weeks of the year.

Category III: Crime and Violence



In addition, the Action Committee Against Violence (ACAV) plays a key role in reducing the incidence of community and family violence in Calgary. In partnership with other community organizations, ACAV has brought the issue of community and family violence to the forefront and has implemented numerous violence prevention initiatives in the community, including HomeFront (see page 41 for more information on HomeFront).



Calgary is perceived as a leader for its multi-sectoral response to cultural and racial diversity issues. The Diversity Calgary Leadership Council was formed in September 2002 to make Calgary a community where all people are valued and respected. Members of this Council are leaders in the private, public, not-for-profit and community sectors and are committed to the implementation of the strategies that came out of a task force on cultural and racial diversity earlier in 2002.

What needs to happen?

Although Calgary is still one of the safest cities in North America, it is important that its residents remain vigilant. Several organizations, coalitions and initiatives have identified and worked towards addressing some of the underlying root causes of crime and violence in the city, but there is more to be done. Initiatives targeting groups at greatest risk of being victimized should be expanded become more integrated.

September 11 has given emergency preparedness new significance, which calls for a sustained partnership among the Calgary Police Service, the Fire Department, the Emergency Medical Services and other community groups. The events of September 11, 2001 have highlighted the importance of developing stronger relationships among the various ethno-cultural groups in Calgary, thus fostering intercultural cooperation and understanding.



Category IV: Natural and Built Environment



This Section deals with the following indicators:

- Air quality
- Water quality
- Pesticide use

HIGHLIGHTS

Calgary was ranked first of 215 cities worldwide in an environmental survey that rated the level of air pollution and the efficiency of waste disposal and sewage systems.

The primary source of outdoor pollution in Calgary comes from emissions from vehicles.

In 2000, Calgary's air quality was rated as "good" at least 90 per cent of the time.

Category IV: Natural and Built Environment



What is “natural and built environment”?

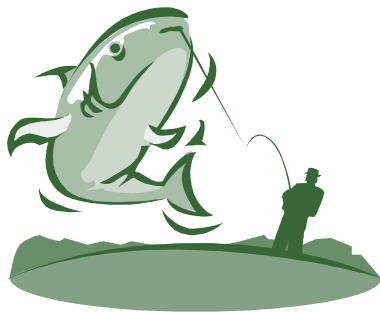
The natural and built environment is a very broad category that encompasses both natural and human-made environments. Environmental issues have a great impact on the health and safety of individuals and communities. Some examples include the height of stairs in office buildings, the distance between a factory and residential areas, pesticide use and road design.

Why should we care about the natural and built environment?

The environment in which we live is one of the determinants of health and well-being. It includes the air we breathe, the water we drink and the food we eat. There is a correlation between poor environment and an increase in diseases such as asthma and cancer. Reduced quality of life and loss of human and animal lives are some of the outcomes of poor natural and built environments.

What is the profile of natural and built environment in the Calgary region?

Calgary was ranked first of 215 cities worldwide in an environmental survey conducted by *Mercer* in 2002 that rated the level of air pollution and the efficiency of waste disposal and sewage systems. However, incidents such as the Hub Oil disaster and the Erlton fire raise some concerns among Calgarians and policy makers about the safety of the built environment. In general, both air and water quality seem to have improved and there has also been a reduction in pesticide use.



Calgary owes the high quality of its natural environment to a number of factors, including the prevailing westerly winds, a service-based economy (as opposed to manufacturing), and a relatively new and technologically advanced infrastructure.



Category IV: Natural and Built Environment



The primary source of outdoor pollution in Calgary comes from emissions of passenger vehicles. As a fast-growing city, Calgary has seen an increase in the number of vehicles from 504,000 in 1990 to 662,000 in 2000. However, the number of vehicles per capita has remained the same at around .73, which indicates that Calgarians dependency on vehicles is staying about the same.¹⁸

What are the indicators used to measure this category?¹⁹

Air quality

Air quality is an index of the quality of the air, based on the percentage of time the air quality is rated as "good". Based on the Index of the Quality of Air (IQUA), Calgary air quality was rated as "good" at least 90 percent of the time in 2000.

Water quality

Water quality is measured by the number of positive coliform samples per 1,000 samples of treated water. In 2000, Calgary's water sampling results were well below the maximum allowable of 100/1,000 samples, indicated in federal guidelines. There has been a general downward trend in the annual coliform occurrence since 1990.



Pesticide use

Pesticide use is the use of pesticide per hectare of open space. In 2000, the rate of pesticide use was 1.0 kg/ha of open space. The intensity of this use appears to be declining as Integrated Pest Management Practices are being implemented. It is anticipated that as the health of the landscape improves, less pesticide will be required.



¹⁸ City of Calgary. (2002). State of the Environment Report.

¹⁹ Ibid.

Category IV: Natural and Built Environment



What is currently happening in the Calgary region?

The City of Calgary is the largest landowner and one of the largest employers in Calgary. It is responsible for a wide variety of public services and plays an integral role in how the local environment is managed. The City publishes *The State of the Environment Report*, which monitors how the City is meeting its environmental policy goals. The report provides a snapshot of trends in Calgary's environment and of the many ongoing municipal activities benefiting the environment.

Sustainable Calgary, a local not-for-profit organization, also publishes the *Sustainable Calgary State of Our City Report*, which, among other things, documents changes in the natural environment. Combined, these two documents provide good information about the natural environment as it relates to safety.

What needs to happen?

Although information on the natural environment is abundant, very little is available on the built environment. Additional research and application of best practices in the area of road design, building design and the creation of healthy public places is needed. This is an area for *Safer Calgary's* Natural and Built Environment Issue Stream to focus on in the future.



The Calgary Police Service utilizes the Crime Prevention Through Environmental Design (CPTED) to promote design principles in planned environments that encourage safe behavior and reduce the opportunities for crime to occur. CPTED needs to be widely promoted and applied, as it has far-reaching implications in a rapidly growing city.



Future Documentation Plans



This is a benchmark report. It is anticipated that data for the indicators will be collected at regular intervals in the future to monitor the effectiveness of individual and collective change efforts in increasing the level of safety in the community. Additional indicator reports will be published on a regular basis, ideally every three to five years, for the next 20 years.

Impacting cultural and behavioral change with respect to safety in a community involves a long-term commitment to change. It is anticipated that significant trends will not become apparent in the first few years of the *Safer Calgary* initiative. What is hoped for is a measurable impact on safety trends over an extended time period, as the efforts started today may not be actually measured for several years.

Future documentation plans will take into consideration the changing contexts of the indicators used in this report. Future reports may see the introduction of new indicators and/or the elimination of current ones. Whenever possible, every attempt will be made to ensure consistency in the use of the same indicators so that trends can be monitored over time.



Summary of Recommendations



The recommendations made in this report are by no means exhaustive; rather, they are based on the identification of gaps in measuring safety in Calgary. These recommendations can be used to stimulate increased dialogue among service providers, community groups and policy makers and to elevate the profile of safety.

Some of these recommendations will be incorporated in future *Safer Calgary* action plans; others require the participation of a wide range of stakeholders to make Calgary a safe place for all. For example, while Calgarians' perception of safety can be researched by members of *Safer Calgary*, increased cross-cultural understanding as a safety promotion strategy requires collaboration with organizations specializing in cultural issues.

Perception of safety

- Indicators to measure the general perception of safety for all Calgarians
- Indicator to measure the perception of safety of those who are at an increased risk of injury or violence
- Indicators to measure the perception of safety regarding all aspects of safety, including environmental and workplace safety

Injury prevention

- Indicators to measure Calgarians' perception of injury-causing events
- Enhanced injury prevention activities for known risk groups
- Strengthened community safety promotion activities where Calgarians live, work and play



Summary of Recommendations



Crime and violence prevention

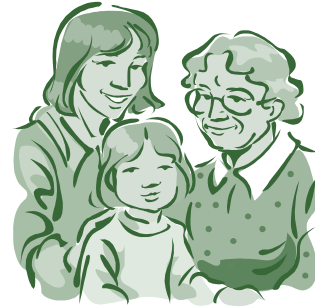
- Continued identification of the underlying root causes of crime and violence
- Expansion and integration of crime and violence prevention activities for those who are at greater risk
- Sustained partnership among the Tri-Services (Police, Emergency Medical Services, Fire) as well as with community groups
- Increased cross-cultural awareness and competency of service providers

Natural and built environment

- Identification of indicators to measure the safety of the built environment
- Additional research and application of best practices in the area of road design, building design and the creation of healthy public places is needed
- Wide promotion of Crime Prevention Through Environmental Design (CPTED) concepts

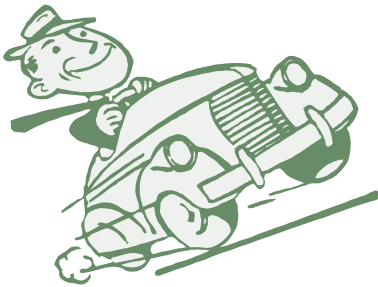
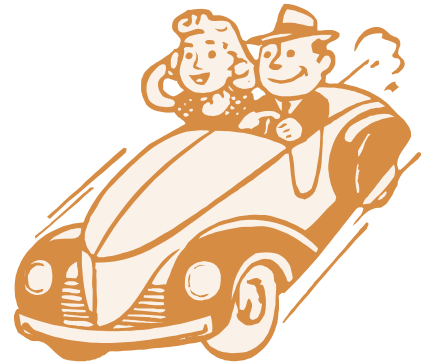


Safety Promotion In Action: Calgary Stories



There are numerous safety promotion and injury prevention initiatives in Calgary - too many to name in one report. The following are three initiatives that provide a glimpse into the range of safety initiatives in the community.

- HomeFront
- Operation Collision Reduction
- Safer Calgary



Home Front



HomeFront is a four-year national demonstration project that began in May of 2000. HomeFront brings together 60 partner agencies and groups that form a coordinated community response to domestic violence. A combination of legal sanctions and treatment is designed to break the cycle of abuse. HomeFront's mission is to reduce domestic violence in Calgary by holding offenders accountable for their actions and improving safety for victims.



The centerpiece of the project is a specialized docket court (court room 412) where a team of experts including Crown Attorneys, Defence Counsel, Legal Aid, Police, Probation and Domestic Court Case Workers collaborate to resolve cases efficiently and interrupt the cycle of violence early in the court process. The team ensures that a full and frank discussion occurs on every case regarding the history, concerns and goals of the victim and perpetrator allowing, the court to craft effective dispositions and conditions.

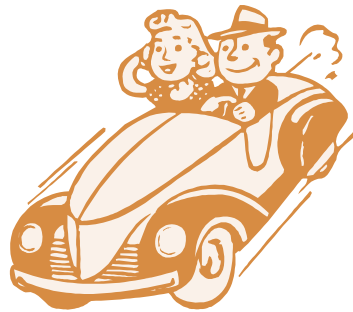
HomeFront assists victims of domestic violence in navigating the criminal justice system by providing Domestic Court Case Workers who ensure that victims' concerns are presented in the specialized court. HomeFront provides for the treatment of perpetrators of domestic violence who have been ordered into counseling through the criminal justice system.



A seven-month follow-up examining 817 cases has shown a re-offence rate of 10 per cent. Sixty-four per cent of those referred to treatment successfully completed their programs. Those individuals who completed treatment were less likely to re-offend (5.9%) as compared to those who did not complete treatment (18%) and who did not attend treatment at all (14%).

For more information please visit www.homefrontcalgary.com or contact Kevin McNichol at (403) 206-2104.

Operation Collision Reduction



Launched in December 1999, Operation Collision Reduction was a traffic safety initiative aimed at reducing the number and severity of collisions at high collision areas in Calgary. It was a joint initiative of the City of Calgary, the Calgary Police Service, the Calgary Health Region and the Coalition of Alberta Auto Insurers. The Calgary Police Service Traffic Section was directly involved in the enforcement component of the initiative.

Operation Collision Reduction involved the analysis of traffic patterns at high collision locations to get a better understanding of why collisions were occurring. A special emphasis was given to intersection safety, as intersection crashes accounted for about 28 per cent of total collisions in Calgary and more than half of the traffic deaths and injuries.

The initiative was based on the assumption that traffic safety could be maximized by looking at factors such as driving skills, vehicle design and road environment. To make high collision locations safer for motorists and pedestrians, the initiative utilized a comprehensive model of coordinated engineering (road improvement), education and enforcement strategies.



In the engineering phase, collision “black spots” were identified and corrected. The education was an eight-week social marketing campaign that includes television, radio, billboard, print and transit advertising featuring the message “Red Means Stop”. In 2002, work began on planning for the installation of red light cameras and increased enforcement of stop signs at intersections.

A provincial survey conducted in late 2000 by Mission Possible, Alberta’s integrated Traffic Safety Initiative, indicated that the campaign had a positive impact on Calgarians’ attitudes about intersection safety. The survey findings also demonstrated that the majority of respondents is concerned about intersection safety and supports the use of red light cameras.

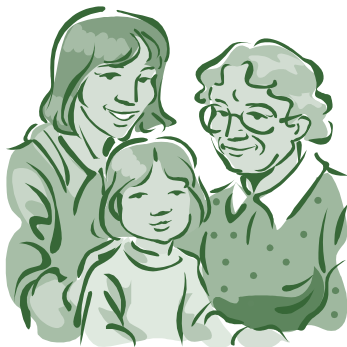
For more information, visit http://www.ama.ab.ca/mission_possible/mission.html or contact Nancy Staniland at 943-8019 or Cam Neilson at 268-1589.

Safer Calgary



Safer Calgary is an umbrella organization that coordinates safety promotion and violence prevention initiatives with the aim of reducing both intentional and unintentional injuries in Calgary. It provides a network for hundreds of organizations that represent a cross-section of the local community networks and all parts of the social structure within Calgary. Guided by a mission to “foster community action towards the creation of a safer Calgary”, this initiative focuses on three main issue streams: (1) injury prevention (2) violence prevention and (3) natural and built environment.

Safer Calgary began with a motion by Alderman Bob Hawkesworth in January of 1999 endorsing the importance of pursuing initiatives that would make Calgary as safe as possible. In partnership with the Calgary Injury Prevention Coalition, a series of public consultations were held between spring 1999 and winter 2000. These consultations provided early support and general direction for the concept, which was more fully developed by a collaborative team of City of Calgary staff, community organizations and citizens. Key among these organizations was the Action Committee Against Violence, whose success as a grassroots-driven coordinating organization was seen as a model for the operation of *Safer Calgary*. This work culminated in a report to City Council containing proposals for a structure and terms of reference. With Council's approval of the report, the planning committee proceeded with the formal creation of *Safer Calgary*, co-chaired by an Alderman and a community member, with the first official meeting held on April 18, 2001.



Today, *Safer Calgary* enjoys the support of more than 100 organizations. A 20-member board of directors, representing different sectors of the community, provides the overall guidance and direction for the initiative. *Safer Calgary* has also spearheaded Calgary's designation as a “safe community” by the World Health Organization and the Safe Communities Foundation of Canada.

For more information, visit www.calgary.ca/cs and click on the ‘social issues’ icon, then on the ‘Safer Calgary’ icon or contact Greg Steinraths at 268-1159.